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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/519,976 | 12/30/2004 | Saso Stojanovski | 218728-000238 | 6951 |
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| DLA PIPER RUDNICK GRAY CARY US LLP P. O. BOX 64807 CHICAGO, IL 60664-0807 | | | EXAMINER MANOHARAN, MUTHUSWAMY GANAPATHY | |
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| | | | 2683 | |

DATE MAILED: 03/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/519,976

Applicant(s)

STOJANOVSKI ET AL.

Examiner

Muthuswamy G. Manoharan

Art Unit

2687

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3,7,8,10,11-13,17,18,20 and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Haverinen et al. (hereinafter Haverinen) (US 2003/0119481).

Regarding claim 1, Haverinen teaches a method for controlling access to at least one cellular radio communication system through a wireless local area network, the cellular system having a radio access network comprising base stations and a controller to which said wireless network is linked, the method comprising the steps of (Figures 2-3):

authenticating a terminal with the cellular system through the radio access network;
allocating an authentication token to said terminal (Paragraph [0024], lines 1-23);
transmitting the allocated token from the controller to the terminal through the radio access network (Paragraph [0024], lines 10-11);

transmitting the allocated token and an identifier of the terminal from the controller to an authentication server (Paragraph [0009], line 3) accessible through said wireless network (Paragraph [0038], lines 19-31);

and authenticating the terminal with the wireless network by verifying that the terminal possesses the token transmitted to said authentication server (Paragraph [0038], line 19).

Regarding claim 2, Haverinen teaches the method as claimed in claim 1, wherein the allocation of the authentication token is performed by the controller (Paragraph [0024], lines 10-12).

Regarding claim 3, Haverinen teaches the method as claimed in claim 2, wherein terminals adapted to the cellular system each transmit a respective list of features to the controller, and wherein the allocation of an authentication token to a terminal authenticated with the cellular system is performed on condition that the list transmitted by said terminal indicates a capability to access the wireless network (Paragraph [0039], lines 22-25).

Regarding claim 7, Haverinen teaches the method as claimed in claim 1, wherein the wireless network is linked to the controller through an IP network (Figure 1a; Paragraph [0016], lines 2-3).

Regarding claim 8, Haverinen teaches the method as claimed in claim 7, wherein the authentication token is transmitted to the terminal with addressing information in said IP network (Paragraph [0041], lines 1-6).

Regarding claim 10, Haverinen teaches the method as claimed in claim 8, wherein the authentication server is a server of said IP network, and wherein said addressing information comprises an IP address of the authentication server (Paragraph [0048], lines 5-7).

Regarding claim 11, Haverinen teaches the method as claimed in claim 8, wherein said addressing information comprises an IP address of the controller (Paragraph [0039]).

Regarding claim 12, Haverinen teaches a controller for a radio access network of a cellular radio communication system, comprising:

- means for interfacing with at least one base station of the cellular system (Figure 1a);
- means for interfacing with a wireless local area network (Figure 1a);
- means for allocating an authentication token to a terminal authenticated with the cellular system through the radio access network (Paragraph [0024], lines 1-23);
- means for transmitting the allocated token to the terminal through the radio access network (Paragraph [0024], lines 10-11);

and means for transmitting the allocated token and an identifier of the terminal to an authentication server (Paragraph [0009], line 3) accessible through said wireless network, so that the terminal is authenticated with the wireless network (Paragraph [0038], lines 19-31) by verification that the terminal possesses the token transmitted to said authentication server.

Regarding claim 13, Haverinen teaches the controller as claimed in claim 12, comprising means for receiving a respective list of features of a terminal adapted to the cellular system, and wherein the means for allocating an authentication token to a terminal authenticated with the cellular system are activated on condition that the list transmitted by said terminal indicates a capability to access the wireless network (Paragraph [0039], lines 22-25).

Regarding claim 17, Haverinen teaches the controller as claimed in claim 12, wherein the means for interfacing with the wireless local area network comprise an IP interface (Figure 1a; Paragraph [0016], lines 2-3).

Regarding claim 18, Haverinen teaches the controller as claimed in claim 17, wherein the authentication token is transmitted to the terminal with IP addressing information (Paragraph [0041], lines 1-6).

Regarding claim 20, Haverinen teaches the controller as claimed in claim 18, wherein said addressing information comprises an IP address of the authentication server (Paragraph [0048], lines 5-7).

Regarding claim 21, Haverinen teaches the controller as claimed in claim 18, wherein said addressing information comprises an IP address of the controller (Paragraph [0039]).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5,6,15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable Haverinen in view of Brusilovsky et al. (hereinafter Brusilovsky) (US 2004/0203732).

Regarding claims 5 and 15, Haverinen teaches all the particulars of the claim, except, wherein the wireless local area network to which said identification information pertains is selected on the basis of a locating of the terminal in the radio access network.

However, Brusilovsky teaches in an analogous art, wherein the wireless local area network to which said identification information pertains is selected on the basis of a locating of the terminal in the radio access network. Here the selection of the WLAN is

based on location and identification information is based on the WLAN. Hence, the selection of the identification information is based on the location. (Paragraph [0031], lines 8-11). Therefore, it would be obvious to one of ordinary skill in the art at the time of invention to have the wireless local area network to which said identification information pertains is selected on the basis of a locating of the terminal in the radio access network. This modification helps in the routing process and also for providing location based services.

Regarding claims 6 and 16, Haverinen teaches all the particulars of the claim except, wherein the authentication token is transmitted to the terminal with identification information pertaining to the wireless local area network. However, Brusilovsky teaches in an analogous art, wherein the authentication token is transmitted to the terminal with identification information pertaining to the wireless local area network (Paragraph [0023], lines 1-8; Paragraph [0030], lines 1-15). Therefore, it would be obvious to one of ordinary skill in the art at the time of invention to have the authentication token is transmitted to the terminal with identification information pertaining to the wireless local area network. This simplifies the billing process.

Claims 4 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable Haverinen in view of Brown et al. (hereinafter Brown) (US 5689563).

Regarding claims 4 and 14, Haverinen teaches all the particulars of the claim, except, wherein the authentication token is allocated temporarily to the terminal. However, Brown teaches in an analogous art, wherein the authentication token is allocated temporarily to the terminal. Therefore, it would be obvious to one of ordinary skill in the art at the time of invention to have the authentication token is allocated temporarily to the terminal. This provides user identity protection.

Claims 9 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable Haverinen in view of Kempf et al. (hereinafter Kempf) (US 2003/0211842).

Regarding claim 9 and 19 Haverinen teaches all the particulars of the claim, except, wherein said addressing information comprises an IP subnetwork prefix employed to broadcast system information through the wireless local area network. However, Kempf teaches in an analogous art, wherein said addressing information comprises an IP subnetwork address or subnet prefix employed to broadcast system information through the wireless local area network (Paragraph [0070], line 3). Therefore, it would be obvious to one of ordinary skill in the art at the time of invention to have said addressing information comprises an IP subnetwork prefix employed to broadcast system information through the wireless local area network. Sub-networks are created for manageability, performance, and security of hosts and networks and to reduce network congestion.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Muthuswamy G. Manoharan whose telephone number is 571-272-5515. The examiner can normally be reached on 7:30AM-4: 30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on 571-272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


LESTER G. KINCAID
SUPERVISORY PRIMARY EXAMINER